# House File 2375 - Introduced

HOUSE FILE 2375
BY COMMITTEE ON COMMERCE

(SUCCESSOR TO HSB 558)

# A BILL FOR

- 1 An Act specifying procedures applicable to claims asserting
- 2 stray electric current or voltage.
- 3 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF IOWA:

- 1 Section 1. NEW SECTION. 476D.1 Short title.
- This chapter shall be known and may be cited as the "Stray"
- 3 Current and Voltage Remediation Act".
- 4 Sec. 2. NEW SECTION. 476D.2 Definitions.
- 5 As used in this chapter, unless the context otherwise 6 requires:
- 7 l. "Board" means the utilities board within the utilities
- 8 division of the department of commerce.
- 9 2. "Cow contact points" means any two electrically
- 10 conductive points which a dairy cow may, in its normal
- 11 environment, unavoidably and simultaneously contact.
- 12 3. "Dairy producer" means any person or entity that owns or
- 13 operates a dairy farm or that owns cows that do or are intended
- 14 to produce milk.
- 15 4. "Preventive action level" is stray current or voltage
- 16 constituting either of the following:
- 17 a. A steady-state, root mean square alternating current
- 18 of two milliamp or more through a five hundred ohm resistor
- 19 connected between cow contact points, as measured by a true
- 20 root mean square meter.
- 21 b. A steady-state, root mean square alternating current
- 22 voltage of one volt or more, across or in parallel with a five
- 23 hundred ohm resistor connected between cow contact points, as
- 24 measured by a true root mean square meter.
- 25 5. "Steady-state" means the value of a current or voltage
- 26 after an amount of time where all transients have decayed to a
- 27 negligible value.
- 28 6. "Stray current or voltage" means either of the following:
- 29 a. Any steady-state, sixty hertz, including harmonics
- 30 thereof, root mean square alternating current of less than
- 31 twenty milliamp through a five hundred ohm resistor connected
- 32 between cow contact points, as measured by a true root mean
- 33 square meter.
- 34 b. Any steady-state, sixty hertz, including harmonics
- 35 thereof, root mean square alternating current voltage of less

- 1 than ten volts, across or in parallel with a five hundred ohm
- 2 resistor connected between cow contact points, as measured by
- 3 a true root mean square meter.
- 4 7. "Utility" means a public utility as defined in Code
- 5 section 476.1, or for purposes of this chapter, any other
- 6 person owning or operating more than one thousand five hundred
- 7 miles of transmission lines and associated facilities in this
- 8 state.
- 9 Sec. 3. NEW SECTION. 476D.3 Rules scope of authority.
- 10 1. The board shall by rule establish standard procedures
- ll and protocols which may be used for the measurement of stray
- 12 current or voltage. The board shall review the rules from time
- 13 to time, or upon petition to the board, to ensure that the
- 14 standard procedures and protocols continue to be scientifically
- 15 and technologically accurate and a reliable means of detecting
- 16 stray current or voltage. Other measurements of stray current
- 17 or voltage made using other procedures and protocols may be
- 18 considered by the board in appropriate cases.
- 19 2. The purpose for the standard procedures and protocols
- 20 established by rule pursuant to subsection 1 shall be
- 21 for utilization by a utility in taking measurements of
- 22 stray current or voltage, and by the board in preparing a
- 23 determination of source document that may be utilized by either
- 24 a dairy producer or a utility as evidence of the source and
- 25 level, if any, of stray current or voltage. The determination
- 26 of source document shall be based on qualified, measurable,
- 27 scientific facts. Neither the board, nor the determination of
- 28 source document, shall establish liability or civil damages in
- 29 connection with a civil lawsuit.
- 30 Sec. 4. NEW SECTION. 476D.4 Stray current or voltage
- 31 program claims notice utility response.
- 32 1. A dairy producer in this state that claims that its
- 33 dairy cows are being affected by stray current or voltage may
- 34 participate in the stray voltage program. The dairy producer
- 35 shall provide written notice to the utility and may provide

1 notice to the board to participate in the program. The notice 2 shall include a nonbinding statement as to why the dairy 3 producer claims its dairy cows are being affected by electrical 4 energy attributable to the utility. Within fourteen business days after receipt of a 6 notice alleging stray current or voltage by a utility pursuant 7 to subsection 1, the utility shall take or arrange for the 8 taking of measurements to identify the existence and magnitude 9 of the stray current or voltage, if any. A dairy producer 10 providing notice of the claim shall permit entry onto the 11 dairy farm at dates and times mutually agreed upon by the 12 dairy producer and the utility. The utility shall perform no 13 other service or inspection on the dairy farm beyond taking 14 measurements of stray current or voltage, except the utility 15 may advise the dairy producer as to recommended on-farm 16 remedial action and may perform such remedial action with 17 the permission of the dairy producer. The utility or its 18 representative shall abide by the dairy farm's biosecurity 19 protocols or, if none, generally accepted biosecurity protocols 20 in the industry, prior to entry onto the dairy farm. 21 utility shall be provided advance notice of any biosecurity 22 protocols adopted by the dairy producer. 23 b. A dairy producer may include with the notice provided 24 pursuant to subsection 1, or in a subsequent notice, a written 25 request for the board to take or arrange for the taking of 26 separate and independent measurements to identify the existence 27 and magnitude of stray current or voltage, if any. Such a 28 request may also be made by the utility. Measurements by the 29 board shall be taken by a representative of the board directly, 30 or by a neutral third-party expert selected by the board for 31 such purposes. The board or a selected third-party expert 32 shall perform no other service or inspection on the dairy farm 33 beyond taking measurements of stray current or voltage, except 34 the board or third-party expert may advise the dairy producer

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35 as to recommended on-farm remedial action. The board or the

1 third-party expert shall abide by the dairy farm's biosecurity 2 protocols or, if none, by generally accepted biosecurity 3 protocols in the industry, prior to entry onto the dairy farm. 4 The board shall subsequently prepare or cause to be prepared 5 the determination of source document as described in section 6 476D.3 which shall be made available to both the dairy producer 7 and the utility. If the utility or the board's measurements identify 9 a level of stray current or voltage at cow contact points 10 in excess of the preventive action level, the utility or the 11 board, as applicable, shall promptly identify if the utility's 12 distribution system's contribution is greater than one milliamp 13 or one volt, measured in the same manner as the preventive 14 action level. For purposes of this determination, stray 15 current or voltage on the utility's distribution system shall 16 be attributed to the utility even if caused by other customers 17 connected to the utility's distribution system. If that 18 portion of the stray current or voltage at cow contact points 19 attributable to the utility's distribution system exceeds 20 one milliamp or one volt, the utility shall, within fifteen 21 business days, commence and diligently pursue to completion, 22 remedial procedures which result in, and are reasonably likely 23 to sustain, a reduction of the stray current or voltage at 24 cow contact points attributable to the utility's distribution 25 system to one milliamp or less or one volt or less, measured in 26 accordance with the rules established by the board. 27 Sec. 5. NEW SECTION. 476D.5 Civil actions. A civil action shall not be commenced by a dairy producer 28 29 against a utility seeking damages or other relief allegedly due 30 to injury caused by stray current or voltage unless the dairy 31 producer has provided notice of its participation in the stray 32 current or voltage program in accordance with section 476D.4 33 at least ninety days prior to filing such an action. 34 civil action against a utility for damages or other relief, the 35 written documentation prepared by or on behalf of the board

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- 1 pursuant to section 476D.4 may be admissible in evidence. Any
- 2 and all civil damages shall be determined by a court of law,
- 3 and shall be based on evidence provided by both parties.
- 4 EXPLANATION
- 5 This bill specifies procedures applicable to claims
- 6 asserting stray electric current or voltage impacting dairy 7 cows.
- 8 The bill provides for the adoption of administrative rules
- 9 by the Iowa utilities board establishing standard procedures
- 10 and protocols for the measurement of stray current or voltage.
- 11 The bill directs the board to review the rules periodically
- 12 to ensure that they remain accurate and reliable with regard
- 13 to stray current or voltage measurement, and provides that
- 14 other forms of measurement may be considered by the board in
- 15 appropriate cases. The bill states that the purpose for the
- 16 standard procedures and protocols shall be for utilization by a
- 17 utility in taking measurements of stray current or voltage, and
- 18 by the board in preparing a determination of source document
- 19 that may be utilized by either a dairy producer or a utility as
- 20 evidence of the source and level, if any, of stray current or
- 21 voltage. The bill provides that the determination of source
- 22 document shall be based on qualified, measureable, scientific
- 23 facts, and that neither the board, nor the document, shall
- 24 establish liability or civil damages in connection with a civil
- 25 lawsuit.
- 26 The bill provides that a dairy producer in Iowa who claims
- 27 that its dairy cows are being affected by stray current or
- 28 voltage may participate in a stray voltage program by providing
- 29 written notice to the utility and, optionally, to the board
- 30 containing a nonbinding statement as to why the dairy producer
- 31 believes its dairy cows are being affected by electrical energy
- 32 attributable to the utility.
- 33 Within 14 business days after receipt of the notice, the
- 34 bill requires the utility to take or arrange for the taking
- 35 of measurements to identify the existence and magnitude of

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1 the stray current or voltage, if any. The bill prohibits the 2 utility from performing any other service or inspection on the 3 dairy farm beyond taking the measurements other than advising 4 the dairy producer as to recommended on-farm remedial action 5 and performing such remedial action with permission. 6 provides that the utility or its representative shall abide by 7 the dairy farm's biosecurity protocols, or if none, generally 8 accepted biosecurity protocols in the industry prior to entry 9 onto the dairy farm, and requires the dairy producer to provide 10 advance notice of any biosecurity protocols they have adopted ll to the utility. 12 The bill provides that a dairy producer, or a utility, 13 may request that the board take or arrange for the taking 14 of separate and independent measurements to identity the 15 existence and magnitude of stray current or voltage, if 16 any, either directly or by a neutral third-party expert 17 selected by the board for such purposes. The bill applies 18 the same restrictions regarding performing no other service 19 or inspection and abiding by biosecurity protocols as are 20 applicable to measurements taken by the utility. After 21 measurements are taken by or on behalf of the board, the board 22 must prepare or cause to be prepared the determination of 23 source document and make the document available to both the 24 dairy producer and the utility. The bill states that if the utility or the board's 26 measurements identify a level of stray current or voltage at 27 cow contact points in excess of the preventive action level, as 28 defined in the bill, the utility or the board, as applicable, 29 shall promptly identify if the utility's distribution system's 30 contribution is greater than one milliamp or one volt. For 31 purposes of this determination, the bill provides that stray 32 current or voltage on the utility's distribution system shall 33 be attributed to the utility even if caused by other customers 34 connected to the utility's distribution system. If that 35 portion of the stray current or voltage at cow contact points

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- 1 attributable to the utility's distribution system exceeds one
- 2 milliamp or one volt, the bill directs the utility to within
- 3 15 business days commence and diligently pursue to completion
- 4 remedial procedures which result in, and are reasonably likely
- 5 to sustain, a reduction of the stray current or voltage to one
- 6 milliamp or less or one volt or less, measured in accordance
- 7 with the rules established by the board.
- 8 The bill provides that a civil action shall not be commenced
- 9 by a dairy producer against a utility seeking damages or other
- 10 relief allegedly due to injury caused by stray current or
- 11 voltage unless the dairy producer has provided notice of its
- 12 participation in the stray current or voltage program at least
- 13 90 days prior to filing the action. The bill states that in
- 14 such an action the written documentation prepared by or on
- 15 behalf of the board may be admissible in evidence, but that any
- 16 and all civil damages shall be determined by a court of law
- 17 based on evidence provided by both parties.